

Abstract

Nucleic acid molecules which encode a branching enzyme from a bacterium of the genus *Neisseria*, vectors, host cell, plant cells and plants containing said nucleic acid molecules as well as starch obtainable from the plants described are described. Furthermore, an in-vitro method for producing α -1,6-branched α -1,4-glucans on the basis of sucrose and a combination of enzymes of an amylosucrase and a branching enzyme as well as the α -1,6-branched α -1,4-glucans obtainable by said method are described.